

DOCKET NO: 259933US79PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
WEI MONIN, ET AL. : EXAMINER: KIM, E.  
SERIAL NO: 10/511,033 :  
FILED: JUNE 6, 2005 : GROUP ART UNIT: 2123  
FOR: METHOD OF GENERATING A :  
PERFORMANCE MODEL FROM A  
FUNCTIONAL MODEL

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313  
Sir:

Mrs. Wei Monin declares:

1. That I received a PhD in pure mathematics degree from University Paris 7.

During my studies there, I undertook graduate level work in pure mathematics and have worked as a research engineer in the computer field for more than 18 years.

2. That I am an experienced research engineer. I have developed solutions for evaluating performances of telecommunication hardware and software systems.

3. That I have authored the following articles:

- Olivier Constant, Wei Monin, Susanne Graf, "A model transformation tool for performance simulation of complex uml models". ICSE Companion 2008.
- Wei Monin, Nicolas Moteau, "Performance Engineering Based on Simulation of Formal Functional Models", DATE07, Nice.
- Pierre Combes, Wei Monin, Nicolas Moteau, "Qualification d'architectures fonctionnelles : Démarche et formalismes pour spécification et qualification d'architectures fonctionnelles réparties", NOTERE'06, Paris France.
- Pierre Combes, Wei Monin, Ana R. Cavalli, Amel Mederreg, Fatiha Zaïdi, Richard Castanet, Marcien MacKaya, Patrice Laurençot, "Une plateforme de validation multi-protocoles et multi-services - résultats

d'expérimentation". Annales des Télécommunications 60(5-6): 588-609 (2005).

- Wei Monin, Fabrice Dubois, Daniel Vincent, Pierre Combes, "Looking for Better Integration of Design and Performance Engineering". SDL Forum 2003.
- Wei Monin, "Techniques de simulation pour évaluer la performance d'un logiciel réparti", Annales des télécommunications (2002).
- Wei Monin, "Performance evaluation by simulation of MQSeries middleware", Africom'2001.
- Wei Monin, Fabrice Guillemin "Intelligent Credit Management for a Credit Based Congestion Control Procedure", 16<sup>th</sup> International Teletraffic Congress (1999).
- Fabrice Guillemin, Wei Monin, "Analysis of cell clumping caused by ATM network GFC protocols". Computer Communications 17(9): 637-646 (1994).
- Fabrice Guillemin, Wei Monin, "Management of Cell Delay Variation in ATM Network", GLOBCOM'92.

4. That I am a listed inventor of the following patents/applications :

- «Procédé d'identification et outil de structuration de fonctions composantes d'une application», W. Monin, P. Combes, N. Moteau, Brevet publié en France 05/2007.
- «Procédé de génération d'un modèle de performance à partir d'un modèle fonctionnel». W. Monin, F. Dubois, D. Vincent, P. Combes, Brevet publié en France 04/2002 et des extensions dans PCP 2004.
- « Procédé et dispositif d'allocation de ressources dans un réseau numérique de transmission par paquets ». W. Monin, Brevet déposé et publié en France (02/1997) et aux U.S (06/2001).

5. That I am an inventor of the above captioned patent application and am currently employed by France Telecom, assignee of this application.

6. That in preparing this declaration and as a basis for my opinions, I have reviewed the below noted materials. In addition, my opinions are based on my education, experience, and background in the field of computer science.

- Automated Performance Modeling from Scenarios and SDL Designs of Distributed Systems" to El-Sayed et al. (hereinafter El-Sayed)
- U.S. Patent No. 6,324,496 to Alur et al. (hereinafter Alur).

7. That I understand claims 11-20 the above captioned application require *a resource specification quantifying resources available from physical hardware of the system*

and that the USPTO is seeking clarification for support of this claim feature. Support for this feature is found at least at page 29 of the specification, which notes that the resource model includes the machines, the size of the buffers and the policy for sequencing the simultaneous processing operation of these machines. The “size of buffers” is recognized in the art as an exemplary resource available from physical hardware of a system as recited in the claims.

8. That I understand that aspects of El Sayed have been identified by the USPTO as describing the features of claims 11-17 and 20. Specifically, page 129 of El Sayed has been identified as describing the claimed *notation including resource consumption metrics, attributing specific resource consumption values in correspondence to a respective execution flow.*<sup>1</sup>

9. That I understand page 129 of El Sayed to describes obtaining a resource consumption value from a repository. As noted at page 129, second column:

“For each activity, a resource consumption value. . . must be made available from a repository of “resource functions.””

This description very clearly describes to one skilled in the art that resource consumption values are found in the repository, not incorporated as a notation used to formalize execution flows as specified in the claims. Further, the second column of page 129 also clearly describes that these resource functions are integrated at the end of building the El Sayed performance model. As such, these resource values are not present in the earlier stages, thus would not be considered in the art as part of an intermediate model, including *a notation identifying causal relationship between different software entities of the system* as claimed.

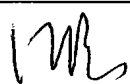
10. That I understand Alur does not provide the features discussed in paragraphs 7-9 above, and, has not been relied upon by the USPTO In this regard.

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<sup>1</sup> Noted in the Official Action at page 8

11. That all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this patent.

Wei Monin



Date

12/12/08